Semi-annual Progress Report for Alaska Regional Observation System Coordination NOAA Award NA05NOS4731097 June 1, 2005 – November 30, 2005

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1.0 Progress on Regional Association Development

This progress report briefly describes activities carried out in support of developing the Alaska Ocean Observing System (AOOS) and follows the format provided by the NOAA Coastal Services Center and Ocean.US. AOOS has met or made progress on the goals, objectives and milestones in the grant application for NOAA Award NA05NOS4731097. If these have not been completely achieved, it is because of external issues related to national IOOS development. However, progress has been made on all of them (see following for additional details), and further work is continuing with separate funding.

1.1 Actions taken to date

1.1.1. Stakeholder and user needs identification and engagement

- Formal and informal contacts continue to be made with potential AOOS users/stakeholders in order to identify user needs and interests in AOOS. The following presentations and briefings were held during this period of time: North Pacific Fisheries Management Council, Girdwood (June 3, 2005); Army Corps of Engineers Coastal Engineering Research Board, Anchorage (June 7, 2005); Prince William Sound Science Center board, Cordova (June 10, 2005); At-Sea Processors Association staff, Seattle (June 16, 2005); NPRB Local and Traditional Knowledge committee (June 27-28, 2005); Aleutian Life Forum, Dutch Harbor (August 17-19, 2005); Mark Vinsel, United Fishermen of Alaska executive director (October 6, 2005); United Fishermen of Alaska board meeting, Cordova (October 20-21, 2005); Vern McCorkle, publisher of the Alaska Journal of Commerce (November 8, 2005); Sea Grant Advisory Committee (November 9-10, 2005); Cooperative Institute for Arctic Research fellows (November 18, 2005); and Joint US Fish and Wildlife Service NASA marine mammals/sea ice workshop (November 29-30,2005).
- AOOS sponsored a user needs and biological monitoring workshop for the Prince William Sound Observing System in Cordova (June 13-14, 2005). More than 50 people attended and a report was prepared. Input from that workshop is now being incorporated into the Prince William Sound component of AOOS.
- AOOS hosted a presentation and user needs discussion in Kodiak (September 28, 2005)
 as part of the Alaska Arctic Science Conference. 40 participants listened to presentations
 about IOOS and AOOS and discussed potential needs for ocean observing in the Kodiak
 region. These will be incorporated into the Gulf of Alaska component of AOOS.

1.1.2. Governance and administrative structure

- The AOOS Executive Director followed up on action items from the AOOS Governance Committee's May 26, 2005 meeting. In addition, the Governance Committee met again on November 21-22, 2005.
- The Governance Committee had been considering a new, more formal MOA drafted by a Governance Options subcommittee - to be used in the interim until a 501 (c) (3) nonprofit corporation is formed. The major concern expressed by the full committee in May was the issue of dues. A dues requirement was voted down at the May meeting. In addition, the committee discussed the Washington DC concerns about federal agencies sitting on Regional Association boards that might have fiduciary responsibilities. That issue continues to be unresolved at the national level. Another issue that has arisen is with State of Alaska concerns that AOOS might become a policy or governance board that may affect state sovereignty. I've met with the Governor of Alaska's Ocean Policy Subcabinet three times in recent months to respond to state questions and explain the AOOS mission. However, the State has indicated they intend to pursue the issue through the Congressional legislative process. I was directed by the AOOS Governance Committee (which will be getting a new name) to revise the new MOA to clarify that the AOOS board has no "governing" role, add guidance regarding federal participation, and circulate for additional review. In the interim, the old MOA is still operative and a set of operating procedures will be developed and used until the new MOA is finalized.
- AOOS continues to actively participate in national IOOS planning efforts, including those of the National Federation of Regional Associations (NFRA). I am currently cochair of NFRA and meet frequently with Ocean.US staff and participating agencies to further development of IOOS.
- I continue to work with AOOS members and others to seek multiple and alternate sources of funding for AOOS, including the submission of numerous proposals to other funding sources.

1.1.3. Business/operations Plan

- Components of business/operations plan continue to be developed: DMAC, education & outreach, stakeholder involvement, integration of existing assets, and plans for observing systems in Alaska's 3 major sub-regions: Arctic, Bering Sea/Aleutian Islands and Gulf of Alaska (workshops, stakeholder outreach, strategic plan, and then implementation plans).
- Once the implementation plans for the 3 sub-regions are developed, costs for these will be developed and plans for long-term sustainability will be developed.

1.1.4. Data Management and Communications Subsystem

- DMAC group in place at UAF with new hire working with national DMAC committees.
 Data Management director participated in IOOS DMAC Steering Team Meeting in November and OOS Tech Meeting in October.
- DMAC is seeking to develop Alaska as a national data site, given its size and distance.
- The DMAC team is developing metadata templates consistent with IOOS guidelines to incorporate on-line hydrographic, current meter mooring, ADCP, and other oceanographic data.
- A MapServer interface has been developed and is in-place for AOOS web pages for data serving.

- Data archival and retrieval are in-place for meteorological forecasting in PWS via AEFF.
- A strategy for merging physical data with biological and other data is being developed, including working with OBIS to pave the way for seamless data sharing.
- The AOOS web page has developed prototype data access for the Prince William Sound Pilot Project for both marine and atmospheric data. The data team is working on improving "access" and "ease of use" for AOOS stakeholders.

1.1.5. Education, outreach and public awareness activities

- A survey of education & outreach capacity and needs in Alaska was conducted summer 2005. An education planning workshop was held October 7, 2005 in Anchorage to begin development of an AOOS education, outreach & public awareness plan which will be a component of the AOOS business plan. 25 people participated, including formal and informal educators and scientists. The report from that workshop is now being circulated for comment.
- Sea Grant's Marine Advisory Program is currently developing ideas for outreach, beginning with the Prince William Sound pilot project, and then for potential AOOS website users.
- A new brochure and portable display were prepared by the Alaska Sea Grant Program.
- AOOS website revisions are underway, but still draft. Plan to go live in late January, 2006.

1.1.6. Regional Coastal Ocean Observing System Activities – planning and integrating a comprehensive integrated system

- Statewide: AOOS Governance Committee decided at its May 2005 meeting to develop a strategic plan as a first step towards developing a statewide AOOS implementation/operations plan. The draft plan was reviewed at the November 2005 AOOS meeting and work will continue on its development. Significant coordination and collaboration is occurring among the federal agencies working in Alaska as a result of the national IOOS initiative. Other activities related to this effort include:
 - o Participated in sessions at Coastal Management conference in New Orleans (July 19-21, 2005).
 - o Toured National Data Buoy Center at Stennis, Mississippi (July 21, 2005).
 - o Met with Southern Mississippi University OOS PIs (July 21, 2005).
 - o Toured Coastal Services Center, met with grant officials and program directors, Charleston, SC (July 15-16, 2005).
 - Met with National Science Foundation regarding potential coastal research sites, Washington DC (July 28, 2005).
 - o Participated in NOAA Climate Office workshop on coastal erosion, Anchorage (August 2-3, 2005).
 - o Briefed NSF Director Dr. Arden L. Bement in Anchorage on AOOS plans (August 15, 2005).
 - o Participated in workgroup developing IPY proposal for housing community based monitoring and local/traditional knowledge data, Boulder (July 18-19, 2005).
 - o Briefed NPRB Science Panel, Anchorage (August 22, 2005).
 - o Participated in ocean observing session at national American Fisheries Society conference, Anchorage (September 12, 2005).

- o Briefed NPRB board in Anchorage (September 23, 2005).
- Participated in Circumpolar Conservation Union workshop at World Wilderness Congress on Climate Change, Anchorage (October 4, 2005).
- o Participated as member of Alaska Sea Grant Advisory Committee in review of their strategic plan (November 9-10, 2005).
- o Participated as Cooperative Institute for Arctic Research (CIFAR) Fellow in review of their strategic plan (November 18, 2005).
- Participated in workshop sponsored by US Fish and Wildlife Service and NASA to develop sea ice monitoring needed for marine mammal management (November 29-30, 2005).
- Arctic: AOOS continues to actively participate in several planning efforts that will be used to help determine the AOOS niche in ocean observing, including the National Research Council's Committee to Develop an Arctic Observing Network of which I am a committee member, other IPY planning efforts, and the Barrow cabled observatory initiative. A North Slope users workshop is scheduled for Barrow this winter.
 - o Participated in NRC Committee on Arctic Observing Network meetings and development of report (May, July and September, 2005).
 - o Short briefing to North Slope Science Initiative, Anchorage (October 4, 2005).
 - o Barrow stakeholders meeting scheduled for February, 2006.
 - o Barrow coastal radar upgraded with real-time data feed.
- Bering Sea/Aleutian Islands: Mark Johnson and Tom Weingartner have been participating with a planning group developing an integrated Bering Sea Ecosystem plan. Explored user needs for Aleutians at Aleutian Life Forum in Dutch Harbor.
- Gulf of Alaska: The focus continues on the Prince William Sound pilot project, as well as preliminary efforts in Kodiak, the outer Kenai Coast and Southeast. KBRR Science Director Scott Pegau has agreed to develop the implementation plan for the Cook Inlet component of AOOS.
 - o Met with Prince William Sound pilot project PIs, Cordova (September 24-25, 2005).

1.2 Results of the activities

 Progress is being made on all fronts: Stakeholder/users Engagement, DMAC, Education and Outreach, Business/Operations Plan, RCOOS activities and Governance/Administration.

1.3 Plans for the next year

1.3.1. Stakeholder/user needs identification and engagement

- Continue with approach to 3 Alaska regions and sub-regions based on Large Marine Ecosystem (LME) concept.
- Work with Resource Development Council and oil and gas industry on future industry forum. Work with Andy Clark at Ocean.US on Pacific coast industry workshop.
- Focus on statewide fisheries, shipping, emergency responders, & oil & gas interests

1.3.2. Governance and administrative structure

- Finalize new MOA once the federal participation issue is resolved. Have signed by multiple federal, state, private, academic, tribal partners. Remove term "governance" since it seems to be causing concerns among state agencies and clarify that AOOS is not a policy-governance entity.
- Develop set of operating procedures for AOOS board and committees to use.
- Consider need for 501 (c) (3) corporation, and if so, conduct legal work.
- Develop approach for stakeholder/user committee (e.g., 1 statewide committee or regional committees, committee mission and terms of reference).

1.3.3. Business/operations plan

- All of the components described above (Governance, DMAC, education & outreach, stakeholder engagement, and coastal observing system activities) are in progress and will be pulled together into an AOOS business/operations plan.
- The date for having a draft plan is pending review of business plan criteria at the national level.

1.3.4. DMAC activities

- Get data management and analysis group at UAF fully up and running.
- Finalize AOOS DMAC plan.
- Hold annual DMAC Committee meeting in January 2006 to review efforts to date and provide input into DMAC development.
- Continue to work on best way to make PWS data on-line as pilot effort.
- Participate in IOOS DMAC activities.

1.3.5. Education, outreach and public awareness activities

• Revise education plan based on public comment. Begin its implementation. Work with Alaska Sea Grant Marine Advisory Program to develop outreach & public awareness plan, as part of AOOS business/implementation plan.

1.3.6. Regional Coastal Ocean Observing System Implementation Activities

- **Statewide:** Strategic plan will be revised per AOOS Governance Committee comments at its November 2005 meeting. Together with the subregional implementation plans, they will be further refined during winter 2005-06 and brought back to AOOS Governance Committee in April or May 2006.
- **Arctic:** Follow-up with results from Barrow workshop. Finalize Arctic Observing Network recommendations with NRC Committee.
- **Bering Sea/Aleutian Islands:** Continue to participate with NOAA, NPRB, USGS, and NSF for BSAI integrated research plan. Determine information needs for Aleutian ecosystem management pilot project.
- **Gulf of Alaska:** Continue work on draft strategy for greater Gulf of Alaska. Continue with pilot efforts in PWS, including follow-up to stakeholder/user and biological component workshop. Develop Cook Inlet observing system plan. Begin Southeast and Kodiak/Shelikof plan.

2.0 Issues, Challenges and Opportunities

Many of these are past challenges and issues that still continue.

- Funding, funding, funding. We need to know it's there, and that the programs will be able to grow. Also, the regions need to know that there will be guaranteed funding for each region. Because of its geographic scope, Alaska will need more funding than other regions. We need MORE funding for existing backbone programs, not less. With base funding being delayed (now until FY 08 at the earliest), it is very difficult to develop and sustain stakeholder support.
- In Alaska, the state is still not an active participant in the AOOS Governance efforts. One of the major concerns appears to be with the focus on "governance" in IOOS planning documents and that this may lead to AOOS involvement in policy and ocean governance issues. We are hoping to resolve this issue this year.
- Ambiguity in what constitutes the national backbone and what is part of regional system.
 Are PORTS part of backbone or RCOOS? This affects how we present budget needs and information, especially to Congress, and how the regions relate to the backbone programs.
- Concern about which is the driving program IOOS or GEOSS? Do we now say we're part of GEOSS? Is this program going to be the one that really gets funded? How do we explain these so Congress is not confused?
- There is still uncertainty about what it means to be a truly "integrated" system.
- Federal agencies must still get the message about coordination and integration. The message needs to come from the top as well as from the bottom.
- The National Federation of Regional Associations needs to get funded, organized and operational.
- Federal agencies need to be full voting partners on the governing boards of all the regional associations. Affiliate, or ex-officio membership, is not adequate.
- Opportunities for Alaska: Potential funding for a new RISA effort (NOAA's Regional Integrated Science and Assessment Program) anticipated for Alaska. Collaboration with PICES MONITOR Committee and North Pacific Ecosystem Status Report. Planning for a potential NEON effort in Alaska is underway. The International Polar Year offers some opportunities for Arctic observing activities. A major collaboration on coastal erosion among all the federal and state agencies and the University of Alaska is underway. NOAA, the state, and the North Pacific Fisheries Management Council are considering a pilot ecosystem management effort in the Aleutians.